

SATURDAY, SEPTEMBER 20, 1873.

ORIGINAL COMMUNICATIONS.

TWO CASES OF FISTULOUS TRACTS CLOSED BY THE USE OF CARBOLIC ACID.

BY H. G. LANDIS, M.D.,

Niles, O.

I GIVE the cases in full, to show the origin of the fistula in each, and that the reader may judge of the efficacy of the acid.

Case I.—Mc—, æt. 64; has had hydrocele for a number of years; has been tapped several times; is of a very nervous temperament, and has had financial misfortunes recently, which greatly depress him, and make him unfit for any severe operation. The hydrocele is on the right side, large, and increasing in size, and is now so annoying that he desires to be tapped. Desiring to avoid the use of chloroform, on which he insisted (greatly dreading the pain which the formerappings had given him), I tapped it in this manner:

January 25, 8 P.M.—The needle trocar of a hypodermic syringe was passed into the tumor, having attached to it two inches of rubber tubing. In the other end of the tubing a two-ounce syringe was introduced, and by slowly moving the piston was readily filled. It was then emptied and reapplied, and in this way a pint and a half of fluid was withdrawn in thirty-five minutes. A somewhat tedious process, but one absolutely devoid of pain and inconvenience to the patient, and to be recommended in cases where the patient is extremely nervous.

January 26.—Feeling none of the inconvenience that the usual method of operating had always given, he had coition before arising, and then engaged in hard labor. By 1 P.M. there was a slight scrotal swelling, and a little fever, which steadily but gradually increased until the next day, when the affected side of the scrotum was as hard as a board, and considerable pain was felt in the right testicle. As the inflammation had come, it was determined to make use of it for the purpose of obliterating the sac, and cloths of lead-water and laudanum were applied to keep it in due bounds; three cathartic pills were also given, as he had had no movement of the bowels since the day of operating.

January 28.—Inflammation stationary, but he is in a depressed condition, and expresses great fear of death. No passage. Repeated pills, and gave Seidlitz powder in the morning; ordered injection P.M., which was not given.

January 29.—Bowels tympanitic; pulse rapid; colicky pains. Gave two injections, after which there was a slight passage. The scrotal inflammation is a little less in degree, and after strapping it the pains were relieved. 8 P.M., pulse quick; paroxysms of abdominal pain. Gave chloral, gr. xl, and another injection, which produced a good evacuation.

January 30.—Better. Tightened straps. The inflammation has been rather more severe than necessary, owing to my attention being drawn away to his general condition. The tumor is now of the same size as before tapping.

January 31.—Complains of continual thirst, with dry tongue. This was relieved by a few doses of ol. terebinth. and acid. carbolic., but reappeared every few days for some time.

February 1.—Took off straps and applied a narrow

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roller bandage fastened to a belt around abdomen. By this contrivance the compression was made more effective, and the size of the tumor diminished somewhat. For the next week he had symptoms of the formation of pus. Pulse 90 A.M., 100 P.M. Slight hectic fever, and a tongue kept moist only by the means already alluded to. The depression of spirits was also continued.

February 18.—Having made no headway by compression, and finding the reaccumulation of fluid evident, tapped in the same manner as before, and drew off about a pint of fluid, which was slightly turbid. This was followed by much improvement in his general condition. The swelling was found to be mainly composed of the thickened walls of the scrotum (at least an inch in thickness), and the cord and testicle were also greatly enlarged by deposits of lymph.

On the 23d, the same procedure was attempted, but this time the contents of the sac were almost entirely pus and flakes of lymph. A small incision was made, through which the pus did not flow freely, and the walls were so thick that a sufficiently large opening would have necessitated an external wound of such size as to alarm the patient. A flexible catheter was therefore introduced, and the cavity pumped out. This was subsequently repeated several times, a pledget of muslin being packed in the wound *ad interim*. Tinct. iodine was applied externally, and subsequently an ointment of iodine and belladonna. Under this course the size of the sac and its pus-producing tendency were diminished very gradually, until in March there was only a fistulous tract extending anteriorly from the centre of the right side of the scrotum (the situation of the incision) to the opposite wall of the sac just above the testicle, and apparently the sac-walls had entirely coalesced except along this tract. Occasionally the external wound would heal up for a day or two, and pus would collect, and occasion considerable distress to the patient until the wound was reopened. This existed until the middle of April, when I resolved to syringe out the fistula with a one per cent. solution of carbolic acid. This was done by passing a small flexible catheter to the bottom, and gradually withdrawing it while the solution was forced in by the apparatus detailed above. This was done every other day for a week and a half. At the end of this time it had permanently closed. Three ounces of the solution was the whole amount used. In another month the parts were of normal size. As the fistulous tract had been maintained for over a month without change, I certainly think that the solution was curative in its action.

Case II.—J. S., æt. 21; after exposure was attacked by catarrhal inflammation of the right ear, which was stopped in two or three days by injections of a solution of sulphate of zinc. In a few days he went on a spree, and the otitis reappeared. This time the inflammation was not so tractable, and, becoming a little impatient, he yielded to his friends, and had a large blister applied behind the ear and extending down the neck several inches, by an "eclectic medicine man." Finding that he only gained an additional disease by this move, he applied to me again to heal the blister. When this had been half accomplished, the discharge from the ear diminishing at the same time, he again fell into the clutches of the eclectic, who applied caustic potassa to the neck, two inches below the mastoid process, and burnt out a hole an inch and a half in diameter, and a half-inch deep after the slough was removed. This was followed by diffuse inflammation of the cellular tissue, and burrowing abscesses following the fascia in several directions. In a few days the patient mustered up courage to return to first principles, and with much

bodily remorse, if not mental, requested me to finish the affair. By this time the ear was nearly well, and we had only the eclectic disease to treat. Several fistulous tracts radiated from the wound, of which the longest extended upwards for three and a half inches, passing behind the mastoid process and touching the periosteum of the occipital bone. This was in a week the only one remaining. Poultices, ointments, washes of divers sorts, and probings, were resorted to; as in the first case, it would close externally, pus would collect, and it would reopen. After a month's failure to diminish its size in any way, I resorted to the injection of a one per cent. solution of carbolic acid, passing a very small flexible catheter to the bottom, and attaching a syringe, as in the first case. Four applications were sufficient. In one week from the beginning of this treatment the neck was well.

These tracts will often form after inflammations of cellular tissue, and if the solution here recommended prove as generally successful in the future, it furnishes us with a much more prompt and less painful remedy than we have heretofore possessed.

August 30, 1873.

SUGGESTIONS FOR THE TREATMENT OF THE ALGID STAGE OF CHOLERA.

BY HARVEY L. BYRD, M.D.,

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IN view of the fact that cholera exists and has prevailed to a considerable extent in some of the cities and towns of the West and Southwest, and the world-wide knowledge of its great fatality under all the plans of treatment hitherto pursued, we are induced to offer some suggestions for the management of the disease in its most fatal stage.

In the first stage of cholera, experience has fully demonstrated the value of medical treatment when based upon correct principles, and recovery is, generally speaking, satisfactorily frequent. But in the algid stage and stage of collapse death takes place to a lamentable extent, and, so far as the knowledge and experience of the writer go, the prognosis in this stage, under any system of treatment hitherto pursued, is always unfavorable. Fortunately for Baltimore, no case of cholera has been seen within its limits during the present visitation to this country, and it is earnestly hoped that an opportunity may not occur for a practical test of the remedies soon to be mentioned for the treatment of the cold and collapsed stages of the disease, in this city. Though singly they are not new, they are brought to the attention of the profession now that they may be tried in the order indicated below, if deemed advisable or proper by the physicians engaged in the management of the disease where it prevails. In summing up and comparing his past experience and success and the success of the profession generally in the treatment of the stages of the disease alluded to above, the writer feels warranted in making such suggestions in regard to their management as may offer a plausible, not to say philosophical, hope of success. The blood is undoubtedly altered in a most essential manner in all cases of cholera, particularly when the disease has advanced beyond the first stage, and the capillaries, and nerves controlling their ac-

tion, become involved in the copious escape of its more fluid constituents. The precise character of the change which the blood undergoes in a person exposed to the choleraic poison for a sufficient time to produce the disease we have at present no positive means of ascertaining, and speculations of our own in regard to it would be out of place in a brief paper like this. The altered condition of the blood, and the perverted or abnormal action of the capillaries and the filaments of nerves distributed to them and to the skin and mucous surfaces of the stomach and intestines, are phenomena that may be witnessed in every case of cholera on the occurrence of the algid or collapsed stage of the disease. The remedies proposed in this stage of cholera are transfusion of healthy human blood, or that of sheep or goats, the hypodermic injection of ergot or ergotine, alone or in conjunction with strychnia, and the electro-magnetic current. The action of these agents in the algid stage of cholera must prove beneficial, if we consider their physiological effects on the human organism as fully established. It is not proposed they should be used simultaneously, but probably in something after the following order: First, transfusion of healthy human or sheep's blood in sufficient quantity; then the hypodermic injection of ergotine for its specific action on the capillaries, and in a short time, if necessary to impart tone to the capillary nerve-filaments, the hypodermic use of strychnia; and, lastly, the application of the faradaic or electro-magnetic current to the nerves, as the par vagum, requiring assistance in the performance of their accustomed functions. With this agent—electricity—we have dried and imparted warmth to the preternaturally wet and cold skin, and excited the kidneys to action, in congestive conditions the result of malarial poisoning, and also in a case of cholera during collapses. Vide *Charleston Medical Journal and Review*, vol. viii. p. 628, 1854.

The foregoing suggestions are the result of careful thought and mature deliberation, and will certainly be practically tested should the algid stage of cholera again claim our professional attention. Our experience has shown that *the recumbent position should be rigidly enforced* as soon as the first stage of the disease is passed, and *the use of the bed-pan insisted upon for several days* after the grave symptoms have been subdued. Mechanical pressure of the abdomen and compression of the anus have also proven serviceable under our observation. This is easily effected by compresses of cloth over the intestines and anus, kept in place by a broad T-bandage. With this bandage pressure can be made, and the peristaltic movements of the intestines modified, if not controlled, even when it is absolutely necessary to allow the occasional escape of the contents of the over-distended lower bowels by the temporary removal of the anal compress. The foregoing, with the judicious use of ice internally and externally, and *positive inhibition of all distilled alcoholic liquors*, should always claim careful attention, whatever other remedies are used in the algid state or stage of collapse of cholera.

The writer is very positive he has seen *decided*

injury from the use of brandy and whisky in the algid stage of cholera, and cannot recall in his past experience a single instance in which *any* of the distilled preparations of alcohol afforded more than momentary benefit in this condition or stage of the disease.

NOTES OF HOSPITAL PRACTICE.

JEFFERSON MEDICAL COLLEGE.

SURGICAL CLINIC OF PROFESSOR PANCOAST.

Reported by FRANK WOODBURY, M.D.

TUBERCULOSIS OF THE ANKLE-JOINT.

THIS little girl has inherited disease, and illustrates the influence of a constitutional taint upon the physical development. The life-springs are poisoned at their source, the vital functions performed imperfectly and irregularly, nutrition vitiated, and the whole organism enfeebled. The little subject is thus rendered more susceptible to disease and less able to resist its ravages. Two years of age, her frame is emaciated, the skin is sallow and shows a tendency to eruption, and she has chronic conjunctivitis. She has not the light hair that frequently accompanies these symptoms, which, for convenience, are grouped under the general term of strumous; but this is the case in a large proportion of scrofulous subjects. In France, where scrofula abounds, there is comparatively little light hair; and the negro race, as we know, is quite subject to it. Experience has shown that of the two classes of strumous subjects the brunette is more liable to phthisis pulmonalis than is the blonde, who suffers more from bone- and joint-affections and diseases of the skin.

About four months ago the child's foot was bruised, and this injury has eventuated in chronic disease of the ankle-joint. The inflammation which was then inaugurated has acted as an exciting cause for the deposit of a crude, amorphous material in the soft parts about the bone, and finally in the bone-structure itself. The malleolus appears very much enlarged, and is rapidly progressing towards caries. The disease would end in destruction of the joint if it were not arrested by proper treatment. The patient's bowels are irregular; the breath is offensive, and the tongue furred, with pits on the tongue, showing the orifices of the ducts of the enlarged mucous follicles with the mucus overflowing around them,—a condition which probably indicates that of the mucous membrane throughout the alimentary tract, by which the lacteals are clogged, the digestion is impaired, and the absorption of chyle interfered with. This accumulated secretion in the bowels forms what was designated by the older writers as *saburra*.

To give the patient the best chance of recovery, we will endeavor to correct the secretions, improve the digestion and appetite, and bring the general health nearer to the normal standard. Until the condition of the alimentary tract is changed, but little benefit can be expected from treatment. We will therefore give, as an alterative cathartic,—

R Hydrarg. chlor. mitis, gr. jss;
Sodæ bicarb.,
Pulv. rhei,
Pulv. myristicæ, ʒiij gr. ss.

This is to be given every third night.

As a tonic, she may have the disulphate of quinia:

R Quiniæ sulph., gr. xxx;
Acid. sulph. aromat., ʒj;
Tinct. cardamom. comp., ʒij;
Syr. acaciæ, ʒiij. M.

S.—A teaspoonful, in a little water, before meals.

Her diet must be carefully regulated, interdicting pastry, salt meat, uncooked vegetables, candies and all other sweet things, and all food which is digested with difficulty. She may have plenty of eggs, milk, rare beef, or chicken, with a little ale or claret if she likes it. She might be given some weak milk-punch, even, or egg-nog, with positive advantage. As she is anæmic, she may also have a tablet of the pyrophosphate of iron (gr. ij, made up with gum and sugar) after each meal; this chalybeate I prefer, and always use, in these cases, as it is less apt than any other form to blacken the discharges from the bowels and render them irritating.

There is fluid around the joint, and the bone is quite soft. To relieve the tension, and let the fluid escape from its bed, I will puncture in several places, with a delicate tenotome, the different layers of skin, fascia, and periosteum, which are arranged like the alternate elements of a voltaic pile. The bone is so soft that the knife enters it like a piece of soft wood, and stands vibrating, as you see, as if it were stuck into a cedar shingle. Having made ten or fifteen of these little punctures and allowed them to bleed sufficiently, the joint will be wrapped in dilute Goulard's extract and laudanum, and, as far as is practicable, kept at rest in an elevated position. These punctures give the fluids exit, relieve the strangulation, deplete the congested vessels, and do an immense amount of good. Of course, in introducing the knife care must be taken to avoid injuring the larger vessels or nerves. With this precaution I have never seen punctures do harm, and they are a thousand times better than leeching.

In addition to this treatment I will order a wire-splint for the foot and leg, open on one side for the dressing, so as to keep the joint perfectly at rest.

[The case was presented at several successive clinics, and soon was progressing most satisfactorily towards a cure.]

CHEILOPLASTY.

This young man, 20 years of age, is brought by Dr. W. Hartzell from Montgomery County, of this State. Seven years ago he was accidentally pyralized during convalescence from typhoid fever. This led to caries of the right half of the inframaxillary bone, causing a loss of all the molar teeth of that side of the jaw, and sloughing of the lower lip and part of the cheek. This left an open ulcer, extending under the chin, the borders of which cicatrized very slowly. This loss of substance allows the saliva to constantly dribble on his clothes, obliging him to wear a bandage around the neck and chin. Speech is interfered with, eating is difficult, and he feels incapacitated for business.

The patient is in good health and solicits relief from this troublesome affection. The lower lip on the right side is entirely gone, from just outside the commissure to beyond the median line, and as far down as the junction with the gum.

Cheiloplasty is the name given to the operation for restoring an entire lip or any portion of it, which has been destroyed by accident, the ravages of malignant disease, or other cause. There are many ways of performing a cheiloplastic operation, and they must be selected to meet the peculiar exigencies of the case. The one I shall do to-day is the best one, in my opinion, to remedy a deformity such as we have before us.

In performing this operation it is better not to use an anæsthetic, if possible, as it is done more conveniently with the patient seated in a chair before you, and the risk of vomiting is avoided, which is annoying during the operation. Having the clothing of the patient covered, and his arms held by an assistant, I take a bistoury and refresh the edges of the cicatricial margin throughout its whole length down to the chin, saving as much of the vermilion mucous border of the old lip

as possible. Two incisions, about three-quarters of an inch apart, are then made on each side outward from the chin, but nearly parallel with the jaw-bone. The upper one starts from the commissure, and involves the whole thickness of the cheek; the second goes down to the jaw-bone. The flaps are then freely detached from the bone with the knife, squared at their ends, and brought together in the middle line by the interrupted and hare-lip sutures. The small part of the lip which was uninjured is thus made to form a part of the flap. The flaps must come together without tension, for fear the stitches will pull out. In order to avoid this they must be loosened well back, when they will readily stretch and rest without tension. After tying the spouting vessels, the capillary oozing should be stopped, not by a styptic that destroys tissue, like Monsel's solution or any of the mineral acids, which would interfere with union, but by the soap styptic, which is quite sufficient and rather facilitates union by first intention.

To support the parts and keep them in contact, we place adhesive strips between the sutures, and over all a lint compress spread with benzoated oxide of zinc ointment. He must keep the lower jaw at rest, and feed from the spout of a teapot.

(One week later.)—The union is now complete, and the pins and sutures may be removed, but the parts should still be supported by strips, and the patient must avoid laughing or talking, for the cicatrix is recent and might yet give way. We will permit the flaps to attach themselves to the gum wherever they will, in order to gain as much nourishment as possible. When the cure is completed we can give him ether and divide the attachments to the lower jaw, so as to render the lip movable.

(Twenty-fifth day.)—The patient presents himself with the lip completely restored, and wishes to have it freed from the gum and jaw. Having done this, we insert an oiled compress between the raw surfaces, to prevent their reunion. The muscles about the commissures, part of which went into the structure of the new lip, will gradually pull the mouth into proper shape.

PHILADELPHIA HOSPITAL.

SERVICE OF DR. F. F. MAURY.

Reported by Dr. J. WM. WHITE, Resident Physician.

FOUR CASES OF EXCISION OF THE HIP-JOINT.

(Concluded from page 789.)

CASE III.—McK., æt. 23, a druggist, and a native of Philadelphia, was admitted to the Philadelphia Hospital on April 16, 1872, with extensive disease of the right hip-joint, in the neighborhood of which there were eight sinuses. One, opening at the femoro-scapular junction, was directed upward, backward, and outward beneath the femoral vessels, and extended to the iliac bone; another was about four inches below the great trochanter. Three, leading towards the acetabulum, were around the anterior superior spinous process of the ilium, and three more were irregularly arranged over the trochanteric prominence.

From each of them a scanty but offensive discharge constantly escaped. On manipulation of the limb, which was withered and shrunken, there was rocking of the pelvis, but no movement of the articulation, the joint being firmly ankylosed. Complete talipes equinus existed, with shortening to the extent of four and a half inches. The man was pale, thin, and anæmic, although he had undergone a preparatory course of tonic treatment.

Operation.—On April 17, Dr. Maury brought him

into the clinic before an unusually large class, and, while chloroform was being administered, explained the circumstances of the case. He then made an incision six inches in length over the great trochanter, carrying it down to the bone and obliterating three of the sinuses. The head of the femur was found separated from its neck and firmly lodged by bony ankylosis in the acetabular cavity, and the femur itself was dislocated backward on to the ilium and strongly united to that bone. There were extensive caries and necrosis of the neck, the trochanter major, and portions of the ilium.

The femur was with great difficulty separated from its attachments, the periosteum, where present, stripped from the bone, the latter sawn in two just below the trochanter, and the diseased structures removed.

The loss of blood was very slight, no ligatures or hæmostatics being required. The cut edges were approximated by four interrupted sutures with adhesive plaster, and oakum was placed over the wound.

Throughout the operation the chloroform was well borne, the pulse keeping strong and regular, and there were no indications of shock or of marked depression. Whisky and morphia were given on recovery from the anæsthetic. For the first twenty-four hours the patient was permitted to assume any position which seemed desirable to him, but was afterwards instructed to lie on his back, with the limb as nearly extended as possible.

April 18.—Pulse 100; slight nausea, relieved by ice and paregoric; no appetite; some pain in the hip and knee.

April 19.—Condition improving; the patient was somewhat annoyed by twitching of the muscles of the leg and thigh, but found relief from the careful application of a bandage. Wound looked healthy, and was dressed with an ointment of the oxide of zinc, adhesive plaster, and oakum,—the latter changed twice daily; urine somewhat scanty, and high-colored, with a copious lateritious deposit. Quinia and muriated tincture of iron were given, and were ordered to be continued.

April 20.—Pulse 100, strong and regular; his appetite was increasing, and the discharge from the wound—heretofore very profuse and sero-sanguinolent in character—was less abundant and more purulent.

April 24.—A free evacuation of the bowels was produced by an enema of warm water. The stitches were removed, and it was found that union had taken place to the extent of one and a half inches at either extremity of the wound, which was granulating in the centre, but remained sufficiently patulous to permit the ready escape of pus. The odor was slightly fetid; but this was corrected by the addition of a little carbolic acid to the oakum. A spasmodic retention of urine necessitated catheterization.

The patient was taking beef-tea, eggs, milk, and the most nourishing diet, with six bottles of porter daily.

April 25.—A small bed-sore appeared over the sacrum, and was dusted with powdered bismuth.

April 28.—Extension was applied to the limb by means of adhesive strips, one brick being used. The discharge from the incision and the sinuses was tenacious, grayish, and free from offensive odor; the wound was granulating nicely, the appetite improving, and the general condition excellent.

May 20.—Since the last date the patient had kept on his back with extension applied; the wound had cicatrized over the larger portion of its extent, but the sinuses remained open, with an increased amount of discharge from those on the inner aspect of the thigh, probably due to the partial closure of the incision.

There was occasional pain in the hip, but none about the knee; a small superficial abscess had formed along the femoro-scapular junction, and had burst, leaving a fistulous opening. The knee and foot showed, as usual,

a tendency to become inverted, to correct which a small sand-bag was placed along the outer side of the leg and the knee fastened to it by adhesive strips.

Convalescence in this case was somewhat protracted, but in four months the patient was able to walk with slight difficulty. His health was improved after the operation, but he died some time after, of Bright's disease of the kidneys.

Case IV.—R. T., æt. 8, was admitted to the Children's Asylum, August 26, 1872. He had fallen from a wagon some months previously, severely injuring his right hip. Ankylosis had resulted, with the formation of several sinuses in the vicinity of the joint, which became entirely useless. In November, 1872, Dr. Maury operated for his relief, removing the head and neck of the femur, and a portion of the shaft.

He bore the operation well, but his recovery was slow and tedious. An extensive inguinal abscess formed, burst, and is still discharging, together with several sinuses.

The boy is, however, greatly improved in general health, has no pain, and by the aid of crutches walks without any difficulty.

RAILROAD FRACTURES—AMPUTATION.

Operated upon and reported by

DR. JULIO J. LAMADRID,
Middletown, New York.

CASE I.—Charles L., æt. 30, and a brakeman on the Erie Railroad, of strong, healthy constitution, was run over on the 13th of March, 1872. The wheels had passed sideways along and over the right leg, lacerating its tissues, and producing a comminuted fracture of all the bones of the leg. On examination I found that amputation was required. I removed the limb on its upper third. We were unable to apply the tourniquet, for want of room, therefore had to rely upon manual compression of the femoral artery. The hemorrhage was trifling.

Thirty-six hours after the operation the patient had rallied from the shock. Five weeks afterwards the wound had almost healed up, when the patient was taken to St. Vincent Hospital, Jersey City, and returned two weeks after, well and sound.

Case II.—John W., æt. 24, German, and a brewer by trade, was run over by the cars on the 18th of June, 1872, while intoxicated. On examination I found that the wheels had passed over his legs, producing a compound comminuted fracture, and removed both legs successfully by the common double-flap method.

The patient recovered nicely from the shock and operation, and one of his legs healed up by first intention, and the other by granulation. He was able to go out on crutches six weeks after the operation, and in three weeks more was entirely well.

EFFECT OF CARBOLIC ACID ON THE URINE.—Mr. W. A. Patchett reports a number of observations upon a peculiar change of color in the urine, produced by the external application of carbolic acid to a raw surface. A blackish or dark olive-green discoloration occurs in from four to forty-eight hours, and the urine resembles an infusion of tea or digitalis to which a little iron has been added. The discoloration does not appear with any regularity or constancy, and may follow the internal use of carbolic acid, but unless poisonous doses have been given the color is not so deep as that produced by the external application of the acid.—*London Lancet*, August 23, 1873.

TRANSLATIONS.

CARBONIC ACID IN THE URINE IN FEVER.

By DR. C. ANTON ERRALD. Translated from *Archiv für Anatomie, Physiologie, und Wissenschaftliche Medicin*

BY WM. ASHBRIDGE, M.D.

OF late the amount of carbonic acid excreted under normal conditions by patients with fever has been regarded as an important element in the metamorphosis of tissue, and has been determined both by direct and indirect methods. The results obtained by investigators provided with better means of research which give an increase in the amount of carbonic acid exhaled from a patient with fever differ from those of the older observers. A similar result is not given by observations upon animals in a febrile state (*i.e.*, when the temperature is artificially elevated), in whom there is either no increase in the production of the gas in question, or if there is any increase it is but slight and irregular. The importance of the question renders it desirable to support the results already obtained, and to strengthen them by a new series of observations upon febrile patients, conducted by new methods.

Apparently the difference in the results in the experiments on men and on animals can be accounted for by individual characteristics, for it is not possible for the experimenter to reproduce the febrile state so accurately in animals that he can apply his results exactly to cases of fever in human patients. Heretofore, in searching for carbonic acid in the excretions the expired air only has been examined, and the gas contained in the other secretion has been overlooked.

The urine in these experiments was drawn into vessels carefully cleaned and from which the air had been exhausted by the air-pump, and its quantity was ascertained by weight and noted. The quantity of oxygen and of carbolic oxide contained in urine is so small that it was overlooked in the estimates of the amount of carbonic acid present. Numerous observations were made, and the fact most clearly established that for the same individual, *ceteris paribus*, the amount of carbonic acid in the urine in fever is greater than in health, and, further, that the evacuation of carbonic acid in its increase and diminution keeps pace with that of the urea. This parallelism is to be expected, since, although part of the carbonic acid comes from oxidation of the albuminates, another part of it has its origin in the consumption of hydrocarbons and fats, and this latter source is the one which is the more important in health. These results must be looked upon as the expression of the increased metamorphosis of tissue in fever, and, since it has been shown that the carbonic acid has its origin in the tissues and not in the blood, it follows that the increased carbonic acid observed in fever likewise has its source not in the blood, but in the tissues.

DROPSY OF THE FOURTH VENTRICLE.

Translated from *Le Progrès Médical*, August 2,

BY WM. ASHBRIDGE, M.D.

AT the meeting of the Société de Biologie, July 26, 1873, two cases of dropsy of the fourth ventricle were reported; in both cases death occurred suddenly, and autopsies were made. The first case was that of a woman who, falling suddenly without consciousness, was taken to the hospital, where, after about an hour, during which she had convulsions, she died. At the autopsy, dropsy of the fourth ventricle was found, and,

in addition, hyperæmia of the pia mater, and a dilatation of the fourth ventricle, the walls of which were pushed apart by a considerable quantity of fluid. The ependyma covering the walls was much thickened. The lateral ventricles were also dilated, but in a much less degree.

In the second case the patient was a young girl, 17 years of age, who entered the hospital with the signs of meningitis, but as the symptoms ameliorated she was able to leave. The same symptoms appeared for the second time and again vanished. But on the 10th of July, a short time after she had been observed quietly talking with her companions, she was found dead.

At the autopsy there was found a moderate hyperæmia of the meninges, dilatation and dropsy of the fourth ventricle, with thickening of the lining membrane, and more than the usual amount of fluid was found in the lateral ventricles. In both cases were found the same lesions, and in both there was rapid death, which was due, probably, to compression, as there was a very rapid pulse and rapid respiration, but no elevation of the temperature. The dropsy was probably promoted by the hyperæmia of the meninges, which was established by the autopsies.

THE CENTRE OF THE NERVES OF ERECTION.

By PROF. W. GOLTZ. Translated from *Archiv für die Gesamte Physiologie*

BY WM. ASHBRIDGE, M.D.

PROFESSOR GOLTZ was induced, by the statement of Eckhard that the nervi erigentes could be followed within the spinal marrow, and even up to the pons and into the cerebrum, to publish the results of investigations of the subject made by himself upon dogs, and which have led him to a different conclusion. He is convinced that the nearest centre from which the nerves in question have their origin is the spinal marrow of the loins. After section of the posterior segment of the cord in the thoracic region, he was enabled to cause erection by reflex influence.

He found also that the occurrence of these reflex phenomena can be checked by irritation of nerves of sensibility.

Further than this, he observed characteristic rhythmical contractions of the sphincter ani in animals whose spinal cords had been cut, which could also be restrained by irritation of certain parts. He concludes that the spinal marrow of the lumbar region contains centres of influence of far more diversified character than has previously been supposed.

CHOLERA AND INTERMITTENT FEVER.

By DR. JOSEPH HILF. Translated from the *Wiener Medicin. Presse*

BY WM. ASHBRIDGE, M.D.

DR. HILF thinks that any one who has had an opportunity of observing cholera in malarial districts where malarial fevers are endemic must have noticed a certain resemblance between these two diseases: both having a hot and a cold stage, being attended by an almost insatiable thirst, and, finally, the occurrence of sweating; and in the so-called pernicious fever the stages of cramps and vomiting are constant, as in cholera. When the causes of the two diseases are compared, a similarity is again noticed, the malarial fever being due to the exhalation of swamps, while he regards the hypothesis that cholera has its origin in the miasma of the delta of the Ganges as the most prob-

able one. He had an opportunity in the year 1855, while stationed in a malarial region of Hungary, of observing cases of cholera during the epidemic of that year, and he was induced by the resemblance alluded to above to adopt the received treatment in malarial fever—i.e., by quinia—in cases of cholera.

His wife, at that time in the sixth month of pregnancy, being attacked with the prevailing epidemic, and all other treatment having failed, he, in the hope of sustaining strength, administered two grains of quinine every hour, and, to his great delight, after the exhibition of the third dose he saw an increase in the temperature of the body and in the number of the beats of the pulse. During the six weeks that the epidemic lasted, out of one hundred and twelve cases treated by tannin and opium, and, when these failed, by quinine, he lost but thirteen cases.

During last year two cases were treated in Pest with the same drug, with favorable results in both cases; and during the present summer numerous cases have been treated both by Dr. Hilf personally, and by others to whom he has recommended the use of quinine, and the results have been uniformly favorable.

THE COMPOSITION OF THE MILK OF WOMAN.

By DR. TH. BRUNNER. Translated from *Archiv für die Gesamte Physiologie*

BY WM. ASHBRIDGE, M.D.

THE object with which these investigations were commenced was to ascertain, if possible, whether differences could be observed between the secretions of the two breasts of the same individual, and, if possible, to solve the question whether the constituents of the milk are prepared by the gland itself, or only separated by it from the blood. The women upon whom the observations were made were, with a few exceptions, from the Foundling Asylum in Prague.

The most extreme care was used in conducting the experiments, and some new methods were employed in conducting the quantitative analysis, by which Dr. Brunner thinks he has attained a degree of accuracy not before reached. The results given by him agree with those obtained by previous investigations more nearly as regards the proportionate quantity of sugar than the other constituents. Part of this discrepancy he thinks can be accounted for by the different methods employed, and part is due also to the fact that the women used for his investigations had borne their children some months before, and it appears that the milk becomes poorer as lactation is prolonged with regard to albumen and fat, while the amount of sugar, water, and soluble salts contained remains nearly unchanged. Some of his observations were conducted with a view to comparing the secretion of the two breasts. His results show that there can be a difference in the composition of the milk of the two breasts, but his observations were not numerous enough to justify the drawing of any definite conclusion on the subject.

A MUMMY MONSTER.—Dr. Chas. S. Swazey, of New Bedford, has kindly allowed me to bring some photographs of Peruvian relics, and among them is one of a human dicephalus, closely resembling our specimen; but as it is in a sitting posture and shown from in front, the existence of median limbs is merely to be inferred. It seems that monsters did occur among the ancient Peruvians, and that they were not consigned to scientific investigation, but duly mummified.—Prof. Burt G. Wilder, in *Proc. of the Am. Assoc. for the Adv. of Science*.—N. Y. Tribune.

PHILADELPHIA MEDICAL TIMES.

A WEEKLY JOURNAL OF
MEDICAL AND SURGICAL SCIENCE.

The Philadelphia Medical Times is an independent journal, devoted to no ends or interests whatever but those common to all who cultivate the science of medicine. Its columns are open to all those who wish to express their views on any subject coming within its legitimate sphere.

We invite contributions, reports of cases, notes and queries, medical news, and whatever may tend to increase the value of our pages.

All communications must bear the name of the sender (whether the name is to be published or not), and should be addressed to Editor Philadelphia Medical Times, care of the Publishers.

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EDITORIAL.

THE ADMINISTRATION OF CHARITIES.

IN our issue of August 30 is a letter from Dr. Levis, of this city, called forth by an editorial which appeared in our columns in regard to the Wills Hospital. That letter seems to establish the truth of what we hinted at,—namely, that the foundation of the charity is not administered in accordance with the *strict letter* of the testator's will. It is very probable that more good is accomplished by the present use of the money, and that a wider reputation accrues thereby to the memory of the donor; but this does not alter the facts of the case. As legal opinion has given "latitude" to the words of the will, we will not be too carping, and will agree with our correspondent that the instrument alluded to is complied with as far as is *practicable and right*.

We have long thought that great care ought to be practised in departing from the strictest *letter* of the law in these matters; and facts which have recently been brought to the light in regard to the London charities have most strongly confirmed us in this opinion. According to these disclosures, some of the richest and most famous endowments of that great city have been little by little completely perverted from their original purposes, and in the management of others the most reprehensible extravagance, even to the point of impoverishment, has been indulged in. It is stated that the hospital and school endowments should be sufficient to take care of all the sick and educate all the children of

the poor; but, in truth, the lower middle classes are ground down to the verge of destitution by the municipal taxes for such purposes. As an instance of the perversion of an educational foundation, it is sufficient to cite the famous Charterhouse school, where it now costs £95 a year for an education, although the school was originally intended for the children of the poor-rate payer.

"Again, the house-rent and establishment charges of seven of the wealthiest city companies alone amount to £164,000 a year, the interest on £2,000,000. And these companies, originally trades benefit societies for men as well as masters (in the old Merchant Taylors' Company we find the 'cissor' or cutter-out side by side with the merchant clothier), have long since eliminated the workman, and have now little more than a nominal connection with the trade they represent."

With the hospitals matters are not much better. The three richest institutions of such nature in London are Guy's, St. Thomas's, and St. Bartholomew's, and of these the latter two were originally workhouse asylums, supported by, and belonging to, the citizens of London. It is said that the new St. Thomas's Hospital will cost, when completed, something like £800 per bed, a sum which at the usual builder's estimate would have given each patient a separate room in a house in Belgrave Square. The little hospital at Poplar, mainly supported by the engineering establishments on the Thames, cost only £30 per bed; the Guards Hospital less than £100. Apply the latter estimate to St. Thomas's, and add £50 a bed for the value of the ground, and there would be a surplus left for pauper infirmaries for 2333 patients. Nor is it clear that the results of all this costliness are proportionate to the outlay. The Poplar Hospital in 1871 had only 14 deaths among 2774 patients, and not one instance of pyæmia. Of lying-in cases, which alone admit of an exact comparison between the workhouse infirmary and the hospital, the deaths in a model hospital ward during six years averaged 1 in 23; in eleven workhouses for the same period, *nil* in 2413.

GLYCERIN AS A MEANS OF DISGUIISING MEDICINES.

WE desire to call the attention of our readers to the use of glycerin as a means of disguising medicines, especially those of an oily nature. Some time since it was announced that if castor oil be mixed with an equal part of glycerin and one or two drops of oil of cinnamon to the

dose, it can scarcely be recognized. We have used this mixture a great number of times, and can confirm all that has been said of it. Children take it out of the spoon without difficulty. We have given it to doctors without their discovering that they were taking castor oil.

In typhoid fever and other diseases in which turpentine is indicated, patients often object very much to its taste. The addition of half an ounce of glycerin to a six-ounce emulsion disguises almost completely the turpentine, especially if a drop of oil of gaultheria or of other volatile oil be added for each dose.

No doubt the principle is capable of wide extension. It is said that cod-liver oil may be disguised with glycerin and whisky; and Dr. Herbert L. Snow writes to the *British Medical Journal* that an addition of a small quantity of glycerin (about half an ounce to an eight-ounce mixture) will altogether obviate the sensation of astringency produced by the chloride of iron dissolved in syrup.

POSSIBLY, when, a few numbers back, in commenting upon Dr. Goodell's article, we urged the necessity of public *fosses d'aisance*, we asked for too much. The public mind—certainly the municipal mind—is not yet prepared for such an advance towards the convenience and comfort of the citizen public. The laying out, building, and ordering of a great city, the securing to its inhabitants adequate supplies of food and fuel, pure water, brilliant and cheap light, as well as adequate drainage and clean streets, are a great work,—so to speak, a process of evolution,—and require time. But in the primordial germ of "Commit no Nuisance," which has so long sufficed us, signs of change are seen. Increased function—we have no longer deserted lanes, our back streets are closely settled, and abound in women and children—calls for increased and higher organization. We hail with delight the coming comfort; but we must not forget that in evolution nothing is done *per saltum*. To skip at once from the dodging into a chance stable or board-yard, or sneaking up a dark alley at the imminent risk of being confronted by stray passers, or the worse choice of going into a vile dram-shop in order to find a place to relieve an all too full bladder,—experiences that few who have served in the southwestern district of the Philadelphia Dispensary have escaped,—to skip at once from such wretched devices to conveniently arranged, comfortable, cleanly public privies would be too great a leap. But it is not too much to ask for

simply constructed, unobtrusive *pissoirs*,—little iron structures properly screened and kept pure by water constantly trickling over an enamelled surface to join the sewer by means of a trap. These could be placed at convenient points everywhere, and would prove a blessing to all classes of men whose occupations compel them to go from place to place for many successive hours without opportunity other than we have hinted at to relieve their bladders. Physicians would be by no means the only gainers; a score of occupations suggest themselves whose followers would gain by it, besides those who from vesical disease, from diabetes, etc., etc., are compelled to frequent micturition. Moreover, we are becoming a beer-drinking people; and, much as has been said in praise of inspiring, bold John Barleycorn, it is a cheering sign of the times when a people changes spirits for malt as an every-day beverage. And we all know what comes of beer! We have no wish to lower the delicacy of feeling on certain subjects, of which, as Americans, we may be proud. Quite the contrary. We plead for no such unblushing boxes as are to be found on the sidewalks of many streets in Paris. What we desire is the supply of a long-felt want, which is compatible with all decency, and the removal of one of the commonest and most frequent temptations of working-men to go into rum-holes.

OUR readers will no doubt remember the hysterical sufferings of a certain London journal on the occasion of the appearance of "*The Medical Times*," due to our having adopted a portion of its title. There lies on the table before us a recent periodical which we fear will cause a relapse of that affection, which was cured by the insertion of the word "Philadelphia" into our title. Canada now boasts the possession of "*The Medical Times*." It certainly would facilitate the understanding by readers of the sources from which quotations may be taken if *The Medical Times* would follow the example of its older brother, and adopt "Canada" as a surname. When we say, however, *The Medical Times*, our readers may rely that we don't mean either *The Lancet* or *The Medical Times and Gazette*.

EUROPEAN papers state that in Munich, where several cases of cholera have occurred, the rooks and crows which before flew about the steeples and through the trees of the public promenades have all emigrated. The same thing happened during the cholera seasons of 1836 and 1854.

According to Sir Samuel W. Baker ("Eight Years'

Wanderings in Ceylon," chap. viii.), the same phenomenon occurred at Mauritius, where the martins, which exist in immense numbers the year round, wholly disappeared during the prevalence of the cholera.

CORRESPONDENCE.

A "NEW" USE OF ETHER.

TO THE EDITOR OF THE PHILADELPHIA MEDICAL TIMES:

DEAR SIR:—I note in some of the daily papers an extract from the London *Lancet*, having reference to the etherization of patients for the purpose of preventing the suffering incident to removal from one place to another, and speaking of it as a new idea.

I am sure there must be many readers of the *Times* to whom, as to the writer, this is a familiar practice, and has been for years. Many invalids in this city are in this way taken painlessly for miles into the country, or to the sea-side, in the early summer of each year, and returned to their homes in the autumn in the same way.

With chloroform, which has been so exclusively used by the British physicians and surgeons, this plan would of course be highly dangerous; and for this reason, it must be supposed, the idea of anæsthesia for the journeys of invalids comes to them as a novelty.

Respectfully yours,

P.

REVIEWS AND BOOK NOTICES.

THINKERS AND THINKING. By J. E. GARRETSON, M.D. (JOHN DARBY), author of "Odd Hours of a Physician," etc. 16mo, pp. 254. Philadelphia, J. B. Lip-pincott & Co., 1873.

"To know that we know what we know, and that we do not know what we do not know, that," said Confucius, "is true knowledge." This comprises the sum and substance, the all and yet the nothingness, of human knowledge; and this humbling thought is the burden of this little book. With upturned eye and outstretched hand, the author yearns to catch at the meaning of those great problems of life which have baffled the maturest minds of every age. But vain; alas, how vain! Oh, "grand, thaumaturgic faculty of Thought," far transcending all things earth-born, nimbly overleaping such hurdles as time and space, and yet powerless, in vesture of flesh, to reach the empyrean of truth!

We can best express our estimate of this book by stating that it concerns itself about those footballs of philosophic conjecture,—the higher truths of life. It begins, in fact, where ends the author's "Odd Hours of a Physician," and is a commentary rather than a complete exposition of the various systems of philosophy. Step by step the reader is guided through the mental labyrinths of those schoolmen who have so broadly thought but so weakly moralized,—men of whom Cicero said, "*nihil tam absurdum, quod non dixerit aliquis philosophorum.*" The shrouded forms of antiquity emerge from the depths of time, and pass before the reader in one stately panorama, unbroken by chapter or section. Their errors the author exposes; their fal-

lacies he points out, but in no carping mood,—it is the lover who chides. This manner of dealing with the sophisms of these *doctrinaires* reminds us of Isaak Walton's advice. "Handle him," writes that quaint angler in his directions for impaling a worm on the hook,—"*handle him tenderly as though you loved him.*"

According to the complexion of the reader's mind will be the lesson imparted by this book. One class of readers will learn from it the folly of the contention between common seekers after truth, who, being alike honest in their intentions, proceed some from *a priori* premises, others from *a posteriori* data. Another will be led to utter thanks for a Bible which has saved them from mistaking for revelation the sentimental inferences of morbid psychological introspections,—thanks for a religion which has overthrown, and ever will overthrow, systems of sociology not based on God and law. A third class will ponder over that "entelechy" which Aristotle discusses, and which the author clothes with the attributes of the soul. The student of Sir William Hamilton will wonder whether he has not at last discovered the mystery of the "non-conditioned;" while the most strait-laced theologian may be led to doubt whether a pure materialism has in it anything more in conflict with his cherished doctrines than the new vocabulary and the unfamiliar terms employed by positive science for logical precision, the differences being not so much in the matter as in the manner.

In the attempt to reconcile positivism with so-called orthodoxy, the author, although evidently at heart a pantheist of the school of Spinoza, feels constrained to adopt the Cartesian system of philosophy. We say "*constrained*," for however consonant with the phenomena of nature an absolute materialism may be, and however upheld by the subtlest thoughts ever expressed in terms of human speech, there is in man an inner consciousness of an alliance with a higher intelligence, of a relationship with the Infinite, which compels a belief in the existence of a divine personality. Again, there is yet another difficulty. The reasoning employed to carry us into materialism inevitably lands us beyond it into idealism. "If," says Huxley, "the materialist affirms that the universe and all its phenomena are resolvable into matter and motion, Berkeley replies, 'True; but what you call matter and motion are known to us only as forms of consciousness; their being is to be conceived or known; and the existence of a state of consciousness, apart from a thinking mind, is a contradiction in terms.'" Impressed by these difficulties, the creed of Descartes is, therefore, the one adopted by the author: "There is one entity,—God; this entity has produced two others, force and matter: in the first have these others their existence."

At the doctrine of evolution the author has his fling, and that in true Socratic style. "Has Mr. Darwin," he asks, "ever been able to change a pigeon into a gestating animal, or a bullock into a bipedal ruminant? Is there to-day one who may [can] cast the disk farther than the Roman athlete, or one who shall be found able to speak words wiser than [those of] Pericles?" These arguments have their value, but lack, in our opinion, the weight of those which contend that the theory of evolution makes greater demands upon our credence than does the theory of plan; that thus far it has failed to account for the origin of life; that, granting the modification of species by the influence of natural selection and by variations in external conditions, this does not prove any derivation by virtue of an internal evolutionary impulse, nor does it consequently invalidate the primitive law of specific generation; that in his imposing position in the animal kingdom, in his gift of speech, and in his mental, moral, and spiritual nature, man bears the indelible stamp of his divine origin;

finally, that the resemblances in nature are but the departures from one general type or model, and, as such, exhibit not so much the modifications of evolution as the handiwork of a *single* Creator,—the mannerism, so to speak, of *one* great mind.

From this imperfect summary it will be seen that this book is well calculated to quicken seed that lies dormant in every brain. A perusal of its chapterless pages can hardly fail to break up the dull round of care and toil, not by beguiling the fancy with cadenced periods and inflated tropes, but by affording food for thought,—calm and philosophic, and yet unsatisfied, because always yearning with quenchless longings after the incomprehensible.

"Sweet Phosphor, bring the day
Whose conquering ray
May chase these fogs away!
Sweet Phosphor, bring the day!"

LECTURES ON MADNESS IN ITS MEDICAL AND SOCIAL RELATIONS. By EDGAR SHEPPARD, M.D. Philadelphia, Lindsay & Blakiston, 1873.

Much as has been written upon insanity, deep as is the knowledge of the specialists, we doubt if there is any subject of equal practical importance upon which the general rank and file of the profession know so little. The subject is not taught, at least that we know of, in our medical schools; the science is embalmed in elaborate treatises which frighten the practitioner from approaching it, so that we doubt if one doctor in ten could tell what are the forms or varieties of the affection. Dr. Sheppard was recently elected to a new chair in King's College, London, for the purpose, evidently, not of producing specialists, but of introducing students "within the precincts of that domain which is peopled alike by the wildest and happiest, the tamest and most mournful, of mankind,"—of giving them just such acquaintance with insanity as would suffice them in the daily duties of general practice. It is the lectures delivered in this course which, having taken the permanent, tangible body of printer's ink, lie before us, and the audience they now address is just such of the profession as those who, five, ten, twenty, or thirty years ago, in the days of their student life, ought to have heard such teachings but had not the opportunity. Looking at the book from the stand-point of a general practitioner, we think Dr. Sheppard has done his work well,—told his story graphically, interestingly, and instructively, and, let us add, honestly.

In the very outset he points out a very serious result of the general professional ignorance,—namely, that commencing insanity is often overlooked, to the detriment of the patient, and that the histories sent up to asylums are often absurdly false, to the detriment of the alienist and the complete shipwreck of his elaborate statistics. He says, "We have no power to alter the record, and it goes, with many other lies, to make up our statistics, which are really nothing more nor less than tabulated falsehoods."

The book is divided into seven chapters: the first discussing general subjects connected with insanity; the second, the nervous system, the pathology of insanity, and various general therapeutic and hygienic means and precautions, such as the Turkish bath, artificial feeding, precautions against suicide, etc.; the third, mania, acute and chronic; the fourth, moral insanity; the fifth, sixth, and seventh, puerperal insanity, general paralysis of the insane, idiocy, and imbecility, respectively.

The description given of a case of mania transitoria is exceedingly graphic, even thrilling; but more space and time ought to have been devoted to the discussion of the diagnosis of this affection, especially the distinctions between it, hysteria, and meningitis, concerning which, we must say, the doctor is very unsatisfactory.

The chapter on puerperal insanity is full and good, and we agree with Dr. Sheppard that chloral is *par excellence* the *hypnotic*, which, we may add, is about all it is.

Space is wanting to follow the author through his one hundred and eighty-three pages of very readable matter. We commend the work as being what might be called a popular elementary treatise on insanity for the general profession.

From the typographical appearance of the book, we judge that it is sailing under false colors so far as the publishers are concerned: the clear black letters mark it as of English manufacture. This of course does not detract from, but rather increases, the value of the book to the reader, who, we hope, will get as much pleasure and profit out of it as we have.

THE POPULAR TREATMENT OF CHILDREN, ETC. Annual Discourse before the Massachusetts Medical Society, 1873. By CHARLES E. BUCKINGHAM, M.D.

INFANT FEEDING AND ITS RELATIONS TO INFANT MORTALITY. Reprint from *New York Medical Review*.

It is rather too bad that we cannot come to a universally accepted opinion about the dilution or non-dilution of cows' milk for infants. While one party is convinced that pure milk is none too strong, we find another, of which Dr. Charles E. Buckingham is, we hope, an extreme exponent, recommending a dilution of one to four, and, further, giving a general rule that where curd appears in the evacuations the milk should be steadily diluted till it disappears (or the child). Surely we should be able to decide this question by a moderate amount of systematic investigation. We believe in pure milk, and recommend it with average results. Our professional brother around the corner believes in two-thirds water, and recommends it with results, to him, as satisfactory. Can it be possible that both are nearly right?—that diluted milk given freely and often will do pretty well, that strong milk given scantily and not so often will also do pretty well, and that deviations from either path lead us into trouble?

Both pamphlets before us contain allusions to the variation that exists between the milk of different breeds of cows and cows of the same breed, showing how one cow's milk is very different from one other cow's milk, and how safety exists only in the actual testing of the milk,—the mere name of "one cow's milk" being a soothing deceit. Some English writer—we forget who—recommends a city-fed dairy, which could be inspected, and considers that green food renders cows' milk too laxative in summer for most infants. For another reason we think it worth trying, being of the opinion that age and travel, while they may improve men, have a decidedly opposite effect upon the lacteal fluid.

The article from the *Medical Review* goes more thoroughly into the variation of cows' milk, a subject to which Dr. Buckingham merely alludes; it also bestows its approval upon the rules of the Philadelphia Obstetrical Society for infant management, while it handles some other "rules" with uncovered hands.

ALBUMEN OBTAINED FROM MILK.—M. Schwalbe has found that by adding one drop of the oil of mustard to twenty grammes of cows' milk, the casein is transformed into albumen. If this discovery is confirmed, it will be of great importance in the art of calico-printing.—*Druggists' Circular*.

AN interesting case is reported by M. Dieulafoy, in which an infant, six hours old, was poisoned by a dessertspoonful of laudanum, and from whose stomach the poison was extracted, before it had taken fatal effect, by means of the pneumatic aspirator.

SELECTIONS.

A NEW MODE OF TREATING FUNCTIONAL DYSPEPSIA, ANÆMIA, AND CHLOROSIS.

BY DR. C. E. BROWN-SÉQUARD.

IN 1851 I had to treat a very bad case of dyspepsia, and succeeded in curing the patient by a plan of treatment which, I think, deserves attention. Since that time I have employed it with complete or partial success in a number of cases of dyspepsia, of chlorosis, of anæmia, and also as a means of ameliorating or curing nervous affections caused by gastric disturbances or poverty of blood. I could not say, as I have not kept notes of all the cases, how many times it has succeeded or failed. In a number of instances where failure occurred I have found that the patients had not carefully followed the rules, and that the failure was, at least in a good measure, due to this lack of care. In two cases only some increase of flatulency and acid eructation took place for three or four days, when the plan was given up. In a case of dropsy, attended with anæmia, dyspeptic pains were increased for a week, when the plan was abandoned. These are the only instances I remember in which some bad effect was produced by this plan, and this aggravation soon ceased.

The first patient I submitted to this plan was a scientific man, thirty-four years old, of strong constitution, but from several causes reduced to a lamentable state of health. For about eight years he had been working very hard, taking no exercise, and living almost all the time in a vitiated atmosphere. He slept very little, and usually passed eighteen or even nineteen hours a day writing, reading, or experimenting. His diet was miserable, and, with the object of avoiding the need of much food, he took a great deal of coffee. He gradually, though slowly, became exceedingly weak. His digestion, which had been very good all his life before he began to work so much, had gradually become very bad. He suffered greatly from pyrosis, and a feeling of great distress, and gastric distention after each meal. Acid eructations and gas were frequently thrown up into his mouth, and when he did not vomit he found that his food remained on his stomach so long that in the morning he frequently rejected things eaten the previous day. At last he had to give up work and stay in bed. But no improvement occurred from the rest he then had or from various modes of treatment. His emaciation and weakness and dyspeptic symptoms increased, and his friends decided to have him removed to the country. But he was so weak that he had to be carried in a litter to the railway station. After a few days, finding that he had not improved, I decided to try a radical change of his alimentation as regards the quantity of food to be taken at a time. Instead of three meals a day I made him take *sixty* or more. Every twelve or fifteen minutes he took two or three mouthfuls of solid food, chiefly meat and bread. He drank a little less than a wineglass of Bordeaux wine and water every thirty or forty minutes. On the very first day this mode of alimentation was begun, his digestive troubles disappeared, and within a week he was so well that he returned to Paris, not, however, to go to work again, as he had been rendered wiser, but to prepare to go to the sea-shore. He continued the same mode of alimentation for about three weeks, and then gradually diminished the number of his homœopathic meals and increased the amount taken at each of them until in about eight or ten days he came to eat only three times a day, and a full meal at each time. His strength during the first week had become almost as great as it ever had been previous to his illness. Since that time

his life has been one of great hardship, which he has borne remarkably well, and dyspepsia has only troubled him in a slight degree rarely and for short periods.

The plan, as stated in the above case, consists in giving but very little of solid or fluid food or any kind of drink at a time, and to give these things at regular intervals of from ten to twenty or thirty minutes. All sorts of food may be taken in this way; but during the short period when such a trial is made it is obvious that the fancies of patients are to be laid aside, and that nourishing food, such as roasted or broiled meat, and especially beef and mutton, eggs, well-baked bread, and milk, with butter and cheese, and a very moderate quantity of vegetables and fruit, ought to constitute the dietary of the patients we try to relieve. This plan should be pursued two or three weeks, after which the patient should gradually return to the ordinary system of eating three times a day.

It is hardly possible to give more detailed rules as regards this hygienic mode of treatment. On the one hand, I have found few persons willing or able to follow it fully. On the other hand, many patients, especially those who have no dyspepsia, do not need to take so minute an amount of food at a time. Besides, it is certain that the quantity of food required varies notably in different persons. Prof. John C. Dalton states that the entire amount of food needed by a man in full health and taking free exercise is: of meat, 16 oz. av.; bread, 19 oz.; fat, 3½ oz.; and of water, 52 fl. oz.; *i.e.*, about 2½ lbs. of solid food and rather more than 3 pints of fluid. According to Dr. Edward Smith and other European hygienists, the amount of solid food and of water required each day is notably larger than that marked out by the able American physiologist I have named. My experience with the patients on whom I have tried the plan of feeding above mentioned shows that the amount of solid food required by an adult is nearly always as follows: from twelve to eighteen ounces of cooked meat and from eighteen to twenty-four ounces of bread. As regards the quantity of fluids I have allowed, it has always been notably less than the amount indicated by Dr. Dalton (three pints) and by Dr. E. Smith (four and a half to five pints).

I hardly need say that, in carrying out the plan I propose, attention must be paid to three points: first, the liking and the disliking of certain things by the patient; second, the importance of variety in food; third, the digestibility of certain things compared with others,—digestibility which varies immensely in different patients. When I found that there was no disgust for a meat-and-bread diet I ordered that roasted beef or mutton, with bread, be the almost only kinds of solid food taken. But most patients were either soon disgusted with this diet or refused even to try it. Having ascertained this, I allowed the selection by each patient of his own dietary, insisting, however, that the quantity of cooked meat should be at least twelve ounces a day. The most varied diet as regards the kind of food can be followed, however, under this plan as well as when one has only two or three meals a day. The only absolutely essential points are that the amount of food taken every ten, fifteen, twenty, or thirty minutes be very small (from two to four mouthfuls), and that the quantity of solid food in a day be from thirty-two to forty ounces, or a little less when, instead of water, the patient drinks beef-tea or milk.

I will not enter into long explanations to show how a marked benefit or a cure can be obtained in functional dyspepsia, in anæmia, and other affections, by this mode of alimentation. I will simply say that the facts I have observed agree with the view that we are naturally organized, like most if not all animals, to eat very frequently, and not, as we do, two, three, or four times a day. It seems certain from the facts I have observed

that functional dyspepsia, when once it has begun (never mind by what cause), is kept up and increased by distention of the walls of the stomach. This fact is already well known, and physicians generally recommend that the quantity of liquid taken be very small, and that the solid food be as nourishing as possible, so that its bulk may be reduced, with the view of avoiding great dilatation by the fluid and solid substances introduced in the gastric pouch. But, although deriving some benefit from this diminution of distention, many patients continue to suffer who might be benefited or cured by the plan I propose.

It may be asked if there is no danger that distention of the stomach by a full ordinary meal, after a patient has followed for two, three, or four weeks the plan I propose, would not be more difficult and a source of greater trouble than before that organ had been allowed to contract considerably during the time this plan has been pursued. Facts answer this question in a way that leaves no doubt. There has never been in the cases I have attended the least trace of an increased trouble due to that cause. Even those patients who have not derived benefit from my plan of alimentation, and among them two who had while following it more acidity and flatulency, have at any rate had no increased trouble after having given it up. It is probable that the good obtained from this plan in dyspeptic patients depends at first on the rest given to the irritated stomach, and subsequently on a great amelioration in the quality of the gastric juice.

In anæmia and chlorosis, not complicated with dyspepsia, the advantage of this plan lies in the rapidity of the formation of blood from the notably increased amount of food that the patient can digest.

I have made but very few trials—and incomplete ones—of this plan in cases of organic affections of the stomach. I cannot but think, however, that it deserves being tried in most of such cases.

Against the obstinate vomiting of pregnancy this plan has already been employed successfully by a number of physicians, and once by myself in a case in which many modes of medical treatment had failed.—*Archives of Scientific and Practical Medicine.*

LIME-BATHS IN MEMBRANOUS CROUP.

IN the *Chicago Medical Examiner* of August 15, Dr. John Bartlett commends the following method of using lime-baths in membranous croup:

"Having formed a small enclosure by covering a clothes-horse with sheets, or by taking advantage of the favorable relation of a door to the corner of a room, so as with bed-clothes to close in a suitable space, the preparations proceed as follows: To one side of the tent, on a piece of old carpet, is placed a small tub; in it is put a common wooden bucket, one-quarter filled with boiling water; at hand is a supply of unslacked lime, and a kettle of boiling water. The nurse and child, or the child alone, if of such age as to remain without an attendant, take position towards the middle of the enclosure, the face of the patient being turned from the tub; by raising the sheet, several pieces of lime, as large as the fist, are placed in the bucket; after a few minutes the evolution of the vapor begins. The physician, through that fold of sheeting forming the door of the tent, frequently takes a view of the steam within, estimating its density by the sight, taste, and smell. It is impossible to indicate the proper degree of this density. I should say it should be somewhat less than that of the cloud of steam escaping from the exhaust-pipe of a steam-engine. The smell and taste of lime should not be too pronounced. The nurse

should be instructed to give notice if the steam or heat oppress her, so as to produce a feeling of faintness, sense of suffocation, or irritation of the air-passages. Should the vapor be deemed too dense, its intensity may be diminished by opening the flap of the enclosure, or, if need be, by withdrawing the bucket. The pulse of the patient should be noticed from time to time, in view of the possibility of exhaustion supervening, an event said to have occurred in the practice of some physicians. More lime and hot water may be placed in the bucket as required. The tub is intended to receive any overflow from the bucket, which, in prolonged cases, will require to be emptied."

He further says, "The *modus operandi* of the agent is uncertain; of course, the simplest theory is that it dissolves the false membrane. Some, as Drs. Meigs and Pepper, refer all benefit from its use to the heated steam evolved. Dr. J. L. Smith suggests that the lime-bath may be an improvement on the steam-bath, in this, that in the latter, on account of the necessity of keeping the room closed, the air soon becomes charged with exhaled carbonic acid, whereas in the former the expired acid is speedily destroyed by the vaporized lime. May it be possible correctly to extend this idea of Dr. Smith's? Thus, the dyspnoea is in great part a result of the inability of the respiratory organs to relieve the blood of its carbonic acid. By using air, as in the lime-bath, charged with a chemical having a remarkable affinity for this acid, may it not be that the pulmonary interchange of gases is advantageously supplemented?"

"I have knowledge of four cases of membranous croup treated by lime; of these, two were speedily relieved. In a third, recovery ensued, though the lime-baths were abandoned for the potash treatment, when the child, though very near death, was thought to be a little better. In the fourth case, the disease had existed one week before medical treatment was sought; an indifferent article of lime was inefficiently used for a time; death resulted. In the last two cases, relief was afforded by the baths; and although they were finally abandoned in one case, and imperfectly used and neglected in the other, there was, in both instances, reason to question the curative power of the agent. In none of these cases was the lime used to the exclusion of other remedies. So far as observed, however, improvement was in no wise referable to the medication."

"This mode of treatment is useful in those cases in which the attendant is uncertain of his diagnosis; in which, while he believes he has to do with a case of simple laryngitis, he fears membranous croup. In such instances the lime-bath relieves the distress of the patient, and tends to quiet the anxiety of the practitioner, seeing that he is treating the apprehended disease with no danger of injury to his patient from the *nimia cura medici*."

GLEANINGS FROM OUR EXCHANGES.

LATERAL ASYMMETRY IN THE BRAINS OF A DOUBLE HUMAN MONSTER (by Prof. Burt G. Wilder).—The four cerebral hemispheres of a dicephalous human monster present such lateral variation in the fissures as are usually noted in a single individual, with certain other features peculiar to a monstrous organization; in one respect, at least, the right hemisphere of the right brain resembles the left hemisphere of the left child. The central right brain is the larger, and this may be connected with the direction of the median leg towards the left side, as if pushed out by the superior power of the right child.—*Proc. of the Am. Assoc. for the Adv. of Science.*—*N. Y. Tribune.*

CHLORATE OF POTASH AND GLYCERIN INJECTIONS IN CHRONIC DYSENTERY.—Dr. Theodore Mead advocates the injection in chronic dysentery of half a drachm of chlorate of potash rubbed up in half an ounce of glycerin and mixed with three to four ounces of warm water. This should be thrown into the bowel thrice daily, and should be retained as long as possible. He gives two cases as illustrative of the results of this plan of treatment.

1. A young man, æt. 27, was first attacked with dysentery in 1861, and had never been rid of the disease, or had a natural stool, up to June, 1868, when he came under notice. He was then having twenty to thirty stools in the twenty-four hours; was weak and anæmic; muscles atrophied; skin dry; pulse weak, and his general appearance indicated approaching dissolution. The use of opium and whisky, which had always been ordered him in large quantities during the whole of his sickness, was at once prohibited; he was given quinine, iron, strong beef-tea, and forty-grain doses of subnitrate of bismuth suspended in mucilage. The injections were at once commenced, and at first gave him intense pain and were rejected as soon as thrown up, but a decided effect was produced. In a short time the unpleasant sensations subsided, and in a few days he could hold the injections an hour. In twelve days his stools were reduced to eight or ten in the twenty-four hours, and were almost free from pus and mucus. In three months he was able to resume daily work, and has continued it ever since, with no return of his dysenteric troubles.

2. In the second case the dysentery followed an attack of bilious fever, was very obstinate, resisted all the ordinary remedies, and brought the patient to the verge of the grave. The treatment was substantially the same as in the other case, and recovery was complete in two and a half months.—*New York Medical Journal*, September, 1873.

THE ANTAGONISM BETWEEN ATROPIA AND PHYSOSTIGMIA (Prof. Roberts Bartholow: *The Clinic*, August, 1873).—In investigating the therapeutic antagonism of atropia and physostigmia, the following experiments were made:

1. Under the skin of a frog 80 minims of a solution containing $\frac{1}{8}$ of a grain of physostigmia and $\frac{1}{4}$ of a grain of atropia were injected. In fifteen minutes there was complete paralysis of the legs, and partial paralysis of the arms, though sensation was not abolished. Soon after, however, on pinching an extremity or on lightly striking the back, the body and limbs were thrown into violent tetanic spasms. Meanwhile the frog lay relaxed and motionless, and when raised up by the head the limbs hung down perfectly flaccid. He remained in this condition apparently dead for half an hour, when $\frac{1}{4}$ of a grain of atropia was injected. Two hours after this all the toxic symptoms had disappeared, and the frog was as active as before the experiment.

2. Inserted under the skin of a frog $\frac{1}{8}$ of a grain of physostigmia; paralysis noticed in three hours. Then injected $\frac{1}{2}$ of a grain of sulphate of atropia; in a few moments tetanic symptoms manifested themselves on the application of an irritant. When an additional $\frac{1}{2}$ of a grain of atropia was administered, a succession of tremors agitated the muscles, and after these ceased no tetanic spasms could be induced.

3. Injected under the skin of a cat $\frac{1}{4}$ of a grain of atropia, producing in a few minutes dryness of mouth, redness of fauces, dilatation of pupils, partial paralysis of hind legs, diminished sensibility to touch, pain, and changes of temperature, with reflex movements remaining normal. Then injected $\frac{1}{4}$ of a grain of calabarine, causing, after five minutes, contraction of pupils, paralysis of all the muscles of animal life, occasional tremors and slight tetanic spasms, slowness of

respiration, which after three hours occurred only once in five minutes; anæsthesia of cornea, and diminished action of heart; the latter, however, continued after respiration ceased. In several other experiments the proportions of the agents were varied, to ascertain how far they were antagonistic as to toxic power. It was found that in corresponding doses physostigmia was more powerful than atropia, as well as slower in its action, and that to obtain a balance of effects enough of the latter must be given to dilate the pupils, and its influence kept up by continued use. Large quantities of both, given together, so overpower the nerve-centres as to destroy life.

The results obtained from the above experiments may be stated as follows: Atropia and physostigmia both produce paralysis; the former by destroying muscular irritability and the excitability of the motor nerves, the latter by paralyzing the spinal cord. They are antagonistic in their action on the sensory nerves,—atropia destroying and physostigmia heightening their sensibility. They are antagonistic in their influence over the respiratory movements,—atropia increasing and physostigmia decreasing them. They are antagonistic in their action on the heart,—atropia exciting the cardiac ganglia and physostigmia paralyzing them; upon the general sympathetic system the same effect is produced, and by virtue of this the pupil is dilated by one and contracted by the other. The exaltation of the reflex faculty noticed in frogs is peculiar, and cannot as yet be explained; atropia when given by itself weakens the reflex faculty, and physostigmia under like conditions destroys it, yet their combined use produces effects which are like those of strychnia, and which come on together with the toxic manifestations of the agents. The tetanic spasms are less marked in warm-blooded animals, but they do occur to a limited extent.

CASE OF EXTRA-UTERINE FŒTATION (Joseph Garland, M.D.: *Boston Medical and Surgical Journal*, July, 1873).—Mrs. C., æt. 32; had been married about nine years, and was the mother of two healthy children. She had had one abortion, after which her menses were regular, and she enjoyed good health. Pregnancy was first suspected in May, 1871, from which time gestation went on without any occurrence of special note, except frequent attacks of pain and discomfort in the region of the uterus, until January, 1872, about the time of expected delivery. At this date slight pains were felt in the back and lower part of abdomen; there were rapid and vigorous movements of the fœtus, and a dark bloody discharge from the vagina; these symptoms soon disappeared, and did not return. Examination revealed a large round tumor reaching from the pubes to the ensiform cartilage, centrally located, and about the usual size, but less resistant than the uterus, containing a fully-developed living fœtus. No foetal heart-sounds could be heard. Digital exploration gave a contracted os, a long cervix, and in the posterior cul-de-sac a large projecting surface, sudden pressure on which moved the whole tumor. On March 16, as there were no further signs of labor, Simpson's sound was passed; it entered with difficulty two and a half inches, seeming to impinge upon and then pass by some solid and impacted body. On March 17, peritoneal inflammation set in; this was succeeded by diarrhœa, during which the patient became very weak and emaciated, and the abdomen rapidly decreased in size. At first nothing unusual was noticed in the discharges, but upon inspecting them, on April 24, portions of a decomposed fœtus, both soft parts and bones, were found. When the rectum was examined, the lower margin of an opening was detected in its anterior wall. The last piece of bone was discharged on May 4. After this, notwithstanding the diarrhœa was nearly checked, and

the most sustaining treatment used, the patient gradually sank, and died on the 20th of May, 1872.

Autopsy.—A hard, irregular tumor was found extending from the cavity of the pelvis to the umbilicus, the greater part being to the right of the median line. On incising the mass, an oblong cavity six and a half inches in length by five and a half in breadth presented itself, filled with foetal bones and a dark putty-like matter. No placenta or placental attachment could be seen. Inferiorly and to the right of the mass was the uterus, twisted on its axis and retroverted; inferiorly and to the left, the large opening communicating with the rectum. Superiorly and anteriorly it was attached to the abdominal parietes, the intestines and the omentum, and was in a gangrenous condition. The walls of the sac were thick and dense, their internal surface being ragged, dark-colored, and sloughing. The bladder was slightly adherent, but otherwise normal. The uterus itself, with the exception of its peritoneal surface, and its posterior portion which formed part of the base of the sac, was in a nearly healthy condition. The left ovary could not be identified, and the left Fallopian tube could not be isolated from the walls of the cavity. The matter contained in the sac consisted of the soft parts of the foetus which had not escaped per rectum, together with all the cranial bones and a number of the larger bones. The length of the shaft of the femur was $2\frac{3}{4}$ inches, and of the tibia $2\frac{1}{4}$ inches, showing that they belonged to a well-developed nine months' foetus.

The most probable explanation of this case is, that the impregnated ovum fell into the peritoneal cavity, and, throwing out attachments, developed there; the placenta being perhaps attached to the posterior surface of the uterus.

THE PHYSIOLOGICAL ACTION AND THERAPEUTICAL EMPLOYMENT OF ERGOT.—Dr. S. Kersch (*Betz's Memorialien*, vol. xviii., No. 5) finds that when a concentrated infusion of ergot is injected into the jugular vein of a dog, the animal becomes restless, howls loudly, and its extremities become perfectly rigid in less than half an hour. Its body is cold to the touch, and the temperature low. If one of the arteries in the limbs be now exposed, it is found to be strongly contracted, firm, and hard to the touch. The pulse-tracings obtained from the arteries show small and short curves, with long intervals between them, indicating that the pulse is slow and the expansion of the artery small. The effect of ergot on the arteries is still more distinctly seen by exposing the arteries of a healthy animal and comparing them with those of a poisoned one. A concentrated infusion of ergot mixed with milk, and administered to pregnant cats, produces similar effects; but the restlessness and cries are more strongly marked, and the symptoms of intoxication are later in appearing. Within two days, at most, the young are expelled. The parent animals die from convulsions and exhaustion. A concentrated infusion of ergot administered to dogs along with milk produces, within three hours, great contraction of the arteries, so that the small ones become quite impermeable, and look like nerves. Ergot likewise causes contraction of the arteries, and consequent slowness and hardness of the pulse, in man. In all the experiments on fasting animals, ergot produced violent retching, and, in most of them, vomiting. When the dose was large enough, almost all died on the fourth or fifth day, from convulsions. Although ergot is much used in hemorrhage after delivery, it is rarely given in puerperal fever; but Kersch was led by an accident to try it in this disease. In two cases which he details, as well as in several others, the best results were obtained; the pulse becoming slower, and the temperature falling shortly after the administration of the remedy. Kersch recommends a trial of

ergot in febrile cases arising from various causes.—*The Medical Times of Canada.*

WEANED FROM HYPODERMICS.—A young lady who had been accustomed for a long time to the use of opium applied to an eminent physician to make hypodermic injections of morphia. He commenced by making the injections as desired of morphia and water; by degrees the quantity of morphia was lessened without her knowledge, until within a few days nothing but pure water was injected; after each injection she would lapse into a quiet sleep, in the same manner that she had been accustomed to when under the actual use of morphia. This treatment was continued for several months, during which time tonics had been used, to strengthen the system and bring about a healthy condition after being so long a time under the influence of opium. When he considered it safe to do so, he told her plainly that she had not taken a particle of morphia for several months, and was entirely free from its influence; this statement of course was received with intense surprise, as well as unbounded joy. The lady is to-day entirely free from any desire for opium.

We give below the formula for an "anti-opium pill" which has been used for several years in the English hospital at Pekin, China, and its efficacy proven in numerous instances, but of which we have no actual knowledge:

R Henbane, gr. $\frac{1}{4}$;
Gentian, gr. $\frac{1}{4}$;
Quinine, gr. $\frac{1}{4}$;
Ginger, gr. $\frac{1}{4}$;
Camphor, gr. $\frac{1}{4}$;
Cayenne, gr. $\frac{1}{4}$;
Cinnamon, gr. $\frac{1}{4}$.

Soap and syrup for coating.

Three pills a day.

—*The Druggist*, July 15, 1873.

TREATMENT OF OBSTINATE CONSTIPATION.—Dr. Macario, of Nice, in a communication to the *Lyon Médical*, observes that in treating constipation most practitioners confine themselves to enemata, laxatives, or more or less irritating purgatives, which in point of fact rather aggravate than cure the affection. He therefore wishes to make known what he says may be truly termed a "heroic" remedy, which he has employed during twelve years with such constant success that he cannot but regard it as infallible.

Constipation, as every one knows, may be produced either by intestinal excitement with deficiency of secretion (nervous constipation), or in consequence of deficient contraction of the muscular coat of the intestine. Here it is produced by atony or intestinal indolence, which bad anti-hygienic habits have induced and keep up. The prolonged contact of the feces with the rectum blunts the sensibility of the mucous and muscular tissues, and the synergetic contraction of the upper portions of the large intestine either does not take place or does so in an insufficient degree, constipation being the result. In nervous constipation the following pill should be given: Pure sulphate of iron, ten centigrammes; Socotrine aloes, five centigrammes; atropine, from one-third to one-half of a milligramme. In the atonic form, for atropine one centigramme of powder of nux vomica may be substituted. By the aid of these pills regular stools may be procured, even in the subjects of obstinate constipation due to *ramollissement* of the brain and chronic myelitis with paraplegia. Dr. Macario gives from one to three pills immediately after dinner, the object being to produce one easy, natural, non-diarrhœic evacuation. If more than this is effected, the dose is to be diminished, one or two pills sufficing in most cases. The use of these "antistypic" pills ought not to be continued indefinitely, a longer interval

being allowed to elapse between their administration in proportion as the constipation diminishes, it being of importance to allow the organs to resume their spontaneous action without any auxiliary. If the constipation returns, the pills can be again had recourse to.—*New York Medical Journal*.

BREECH PRESENTATIONS—RAPID DELIVERY.—The infant's body is delivered with its back superior, the patient lying on her back. First draw the cord down a little way; then, if the head has passed the superior strait, the face is in the hollow of the sacrum; if not, bring it down, according to the usual rules, as rapidly as possible. Then introduce the index finger of one hand into the mouth of the child, drawing the chin down; at the same time with the fingers of the other hand push the occiput up, thus securing perfect flexion. This accomplished, the face of the child will present at the vulva; and immediately withdraw the finger from the infant's mouth, and pass two fingers into the rectum of the patient, and you readily reach the vertex and use these fingers as a lever, lifting *upward* and *outward*, while a similar movement is communicated to the body of the child with the other hand placed below it. If you are on the patient's right side, your index and middle fingers of the right hand will be against the vertex of the child; if upon your left, those of your left hand. If unfortunately you have failed to deliver the body with the back superior, and you have the face towards the pubes, the same general steps are necessary, save that the finger of your right or left hand, as the case may be, should be *kept* in the child's mouth while the upward and outward movement is made with the fingers on the vertex. This method of delivery is applicable to all cases where the body of the child is born first. By it the head can be delivered in less time than required for the application of forceps, and it is much safer for the mother at least. Pursuing it, I have never lost a child in breech presentation, or in podalic version.—*Dr. Langdon, in the American Practitioner*.

THE TREATMENT OF CHOLERA.—Dr. Fergus, of Glasgow, gives the following rules:

Avoid all depressing passions and exhaustion of nerve-force; avoid brandy, or other stimulants, as they are not preventives; make no change in the usual diet, if that is simple, digestible, and nutritious. Avoid excessive fatigue; if overheated, beware of chill, but see that the skin is kept comfortably warm: should the slightest diarrhoea occur, the patient should *lie down immediately*, and, if chilly, have bottles of hot water placed to the feet and legs, also take thirty drops of laudanum, and if a physician is not at hand, the following recipe may be used:

R Oil anise, oil cajeput, aa ʒss;

Ether sulph., ʒss;

Liquor acid Halleri (which consists of one part of concentrated sulphuric acid to three parts of rectified spirits), ʒss;

Tinct. cinnamon, ʒij.

Give ten drops every fifteen minutes in a tablespoonful of water. The opiate may be given with this *once or twice*, but not more.

THE PAPILLARY REPRESENTATIVE OF TWO ARMS OF A DOUBLE HUMAN MONSTER (by Prof. Burt G. Wilder).—A dicephalous human monster, mentioned in the previous paper, has one right arm and one left arm. The missing arms seem to be represented by a nipple-like papilla, on the line of union of the two individuals. Under this is a median and symmetrical clavicle and scapula, into which are inserted most of the usual muscles. Does such rudiment entitle the

monster to the title of *Tribrachian*? Excepting the rudimentary arm, this specimen nearly resembles that described by Prof. Wyman in *The Boston Medical and Surgical Journal* for March 29, 1866. In this, however, the anterior separation was more complete, and allowed the formation of a median and symmetrical arm, like the median legs of this and of that specimen.—*Proc. of the Am. Assoc. for the Adv. of Science.*—*N. Y. Tribune*.

MISCELLANY.

INTRAVENOUS INJECTION OF AMMONIA IN SNAKE-BITE.

"To the Editor of the *Indian Medical Gazette*:"

"DEAR SIR:—History repeats itself in science as in other matters. To those curious in the question of the treatment of snake-bite, the accompanying extract from Fontana, nearly one hundred years old, will be interesting and suggestive.

"Yours faithfully,

"J. FAYRER.

"LONDON, 22d May, 1873."

TRANSLATION.

"OPUSCULI SCIENTIFICI DE FELICE FONTANA, p. 125, LETTER N,

"Addressed to M. Gibelin, Aix en Provence, 10th July, 1782.

"It is very true that several cases of cure of viper-bites by the injection of spirits of hartshorn (ammonia) into the veins have been reported in our Italian papers, and it is also true that these cures appear surprising and almost miraculous from the manner in which they are presented to us: it appears, moreover, that certain persons take a quiet pleasure in assuring the public that the true specific against the poison has at last been found, that which I have in vain sought for many years, whilst with philosophical candor I have declared the inutility of my long researches on the subject.

"Truly, I must confess that I did not think of seeking a remedy in "*medicina infusoria*," for reasons that I omit at present, but which you can easily imagine for yourself, nor did it concern me to consider the case mentioned by Valisneri, being a solitary one. . . . It is certainly the case that the vaunted cures are too few to form even a probable proof that this remedy is a specific, and that those cures are due to it, and not to the strength of the individual and to the non-deadly nature of the viper poison. Perhaps one hundred cases would hardly be sufficient to make it certain that spirits of hartshorn is the specific against the venom of the viper: if it were so, the bitten animals into whose veins it is injected should be preserved from death, and the more easily so the larger the dose and the sooner after the bite it is injected. I have employed in my experiments lambs and very large rabbits. The lambs have been bitten twice and even three times; the rabbits only twice. The bites have been inflicted in the thigh, and the spirits of hartshorn has been *introduced into the blood in the jugular vein* immediately after the bite, so rapidly that in some animals only a few moments intervened.

"The quantities used were twenty to forty drops, doses that could be borne by the animals without fatal effects, as I had ascertained by experiment on animals not bitten; a larger dose would have done harm and might have killed the animals. Three lambs were bitten on the thigh; and all died in less than two hours, one after a few moments.

"Two rabbits out of nine that were bitten survived ten hours, all the others died in less than one hour. I am aware that a dozen experiments are insufficient to prove the *absolute inutility* of the spirits of hartshorn against the bite of the viper, but they are sufficient to show that we should not place confidence in the few favorable cases cited by the supporters of this remedy.

"So long as medical men are not experimenters, the art of healing will not make great progress; and it is to this, and nothing else, that it is to be attributed that medicine has remained stationary from the time of Hippocrates until the present, whilst all other sciences have been progressing with gigantic paces.

"The physician considers to be the remedy of a disease that medicine after the use of which recovery has followed, when really, in sound logic, no other deduction should be made than that the vaunted remedy has not killed the patient. We observe that the physician quietly believes, under the influence of this sort of reasoning, that the sick person would certainly have died had he not treated him, and with this he assumes either that of which he knows nothing, or which is doubtful, if not altogether false; and it is not enough that the sick person recovers, but he must also assure himself that he would have died without the remedy."

The following preamble and resolutions were passed by the Board of Regents of the University of Michigan at a late meeting:

WHEREAS the Legislature of the State of Michigan at its last session re-enacted the law of 1855, requiring the appointment of Homœopathic Professors in the Medical Department of the University; and whereas it has always been claimed by the Board of Regents that the law was an infringement upon the rights and prerogatives of the Board; and whereas the Supreme Court of the State has refused to grant a mandamus requiring the Regents to comply with the law, thereby substantially confirming their action: therefore,

Resolved, That we maintain the position heretofore taken, and decline to make the appointments required by the law.

Resolved, further, That we do this in no spirit of factious opposition to the apparent will of the Legislature, but because we believe the true and best interests of the University demand it.

Resolved, That we reaffirm the former action of the Board expressing a willingness to take official charge of an independent school of homœopathy and connect it with the University, whenever the means shall be provided for the payment of its professors.

THE SHAH'S PHYSICIAN.—The body-physician to the Shah is a Frenchman, Dr. Tholozan, who accompanies

him on his travels. He has held this position now for fifteen years. He is a member of the Paris Academy of Medicine, and military physician in the French army. He made himself a good reputation by his works on the origin and development of cholera. His epidemiological papers have given him such a position in England that he was banqueted in Greenwich. His second physician, who also accompanies him, is an Englishman, named Dikson. It was his good fortune to have cured the Shah of an obstinate fever during the absence of his physician in Europe.—*All. Wien. Med. Zeit.*, July 1, 1873.—*The Clinic*.

ENDOWMENT OF A MEDICAL COLLEGE.—James Johnston, of Indianapolis, has endowed the Medical College of the Northwestern Christian University (Indiana) with half a million dollars and a site for its location.—*The Clinic*.

We regret to see that the intention is announced of discontinuing the *Madras Monthly Medical Journal*. This excellent monthly has apparently succumbed to the competition of more frequently published papers, such as our able contemporary the *Indian Medical Gazette*.

MR. WILLIAM MAC CORMAC has been appointed successor to Mr. Le Gros Clark as Surgeon to St. Thomas's Hospital.

NOVEL ADVERTISING.—The following appeared in the *Cincinnati Commercial* of August 26:

"BIRTHS.

"ANDERSON.—August 25, to Mr. and Mrs. Lang T. Anderson, a daughter; weight 12½ pounds. Thanks to Dr. Comegys."

MR. BROUGHTON, the Government quinologist at Ootacamund, in a report to the Chief Secretary, denies that *Eucalyptus globulus* contains quinine, quinidine, cinchonidine, or cinchonine, in any such proportion as has been asserted.

EXTRAORDINARY FATALITY.—According to the report of the Board of Health of St. Louis, there were two hundred and ten deaths from *cholera morbus* in that city from June 21 to July 19, inclusive. While extending our sympathies to the citizens of St. Louis, we would suggest to the Board of Health the propriety of importing a rural physician to give them a few lessons in diagnosis and treatment.—*Leavenworth Medical Herald*.

THE reports of M. Nélaton's health are this week much more favorable.—*British Medical Journal*, August 30.

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY, FROM SEPTEMBER 9, 1873, TO SEPTEMBER 15, 1873, INCLUSIVE.

WOODHULL, ALFRED A., ASSISTANT-SURGEON.—Granted leave of absence for twenty days, with permission to leave limits of the Department. S. O. 157, Department of the South, September 6, 1873.

BYRNE, C. B., ASSISTANT-SURGEON.—Granted leave of absence for sixty days, with permission to apply for an extension of thirty days. S. O. 182, A. G. O., September 11, 1873.